

Attachment L - Chester Area Maintenance Yard

VDOT MS4 (General Permit No. VAR04)
Chester Area Headquarters Facility
VDOT District No. 4

Facility Name: Chester Area Headquarters Facility
Location: 2201 West Hundred Road, Chester, VA, 23831
Latitude: N 37.351882* **Longitude** W 77.4062*

Date of Visit: October 23, 2012
Entry Time: 8:38a.m. (approx)
Exit Time: 10:20 a.m. (approx)

Site Owner and/or Operator: VDOT-Richmond District
Site Contacts: J.R. Robertson, III (Area Maintenance Superintendent, VDOT) and David L. Bishop (Bridge Crew Superintendent, VDOT)

Conducted by: Bobby Jacobsen (PG Environmental, LLC), Chuck Schadel (U.S. EPA Region 3), Kyle Zieba (U.S. EPA Region 3), and Kaitlin McCann (U.S. EPA Region 3)

Accompanied by¹: Jeff Selengut (Permit Writer, Virginia DCR), Roy Mills (Program Administrator, VDOT), Sharon Harless (VDOT Consultant, EEE Consulting, Inc.), Ian Frost (VDOT Consultant, EEE Consulting, Inc.), Ellen Porter (Office of Attorney General, VDOT), Ed Wallingford (VDOT), John Olenik (Engineer I, VDOT)

Site Visit Report Prepared by: Bobby Jacobsen (PG Environmental, LLC)

On October 23, 2012, the EPA Inspection Team inspected the Chester Area Headquarters Facility (hereinafter, Facility). Dry weather conditions were experienced throughout the inspection activities. Weather history reports from the National Oceanic and Atmospheric Administration station Richmond Intl AP - 44-7201 indicated that on 10/19/2012, 0.05" of precipitation occurred, on 10/18/2012, trace amounts of precipitation occurred, and 0.68" of precipitation occurred, 10/19/2012, 0.15" of precipitation occurred.

Based on a review and comparison of the Facility location and the United States Census 2000 Urbanized Area designation, it was determined that the Facility is located within the urbanized area. The Facility is located on both the east and west sides of I-95 and houses a road maintenance crew and a bridge maintenance crew. The portion of the Facility to the west of I-95 comprises multiple buildings (e.g., office buildings and storage buildings), a vehicle fueling island, a vehicle washing area, and vehicle/equipment storage areas. Various activities are conducted at the Facility, including the following: vehicle washing, storage, and fueling, and equipment and material storage. A salt storage dome and salt pond are located in the portion of the Facility to the east of I-95. In addition, the EPA Inspection Team visited a remote stockpile location associated with the Facility which is located about one quarter mile north of the Facility, to the west of I-95.

¹ Sign-in sheets for the site visit are provided after the photograph log.

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The VDOT Consultants stated that there were "no regulated outfalls" (refer to Observation 1 in the main report) from the Facility. Stormwater runoff from the portion of the Facility to the west of I-95 is primarily conveyed to on-site storm drain inlets which discharge to a roadside drainage ditch on the west side of the onramp to I-95 South. The VDOT Area Maintenance Superintendent (J.R. Robertson, III) stated that the ultimate receiving water for stormwater runoff from the Facility is Redwater Creek. Stormwater runoff from the portion of the Facility to the east of I-95 is conveyed to on-site storm drain inlets which discharge to the salt pond. According to the VDOT Area Maintenance Superintendent, the salt pond does not have an outlet, and water in the pond is either pumped out to be used for a brine mixture or the water evaporates. Stormwater runoff from the remote stockpile location is conveyed via overland flow to a pipe to the west of the stockpile area that discharges to a roadside ditch along the onramp to I-95 South. The EPA Inspection Team obtained/observed the following regarding the Facility

1. The VDOT Area Maintenance Superintendent explained that formal documented inspections of the Facility for pollution prevention and good housekeeping are not conducted on a regular basis.
2. The VDOT Consultant stated that at the time of the site visit there was not a formal plan for addressing stormwater pollution prevention and good housekeeping at the Facility (e.g., Stormwater Pollution Prevention Plan). He added that a draft Stormwater Pollution Prevention Plan (SWPPP) was being prepared in preparation for the issuance of the next MS4 permit.

Portion of the Facility to the West of I-95

3. A storm drain drop inlet was located near the southwest corner of the storage shed (see Photograph 1). BMPs for the storm drain inlet were not evident. Vehicle tracking of what appeared to be a petroleum product was observed overtop and adjacent to the inlet (see Photographs 2 and 3). The VDOT Area Maintenance Superintendent explained that a "bobcat" machine likely drove from the covered vehicle storage area where there was staining on the ground surface and past the storm drain inlet. Based on discussions with VDOT staff, stormwater runoff which enters into this storm drain inlet is discharged to the roadside drainage ditch on the west side of the onramp to I-95 South, described above in the Facility description and pictured in Photograph 4. A visible sheen was observed on the water surface near the outfall to the I-95 South, drainage ditch (see Photograph 5). The EPA Inspection Team and VDOT staff swirled a stick through the sheen and noted that the material broke apart rather than congealing back together, indicating that the sheen was likely caused by organic material rather than petroleum products. Water samples were not collected and analyzed to confirm whether there was a presence of petroleum products in the standing water.
4. Sediment was observed on the impervious ground surface upgradient and adjacent to the storm drain inlet near the western entrance gate to the Facility (see Photograph 6). Inlet protection was not provided for the inlet (see Photograph 7). Based on discussions with VDOT staff, stormwater runoff which enters into this storm drain inlet is discharged to the roadside drainage ditch on the west side of the onramp to I-95 South, described above in the Facility description and pictured in Photograph 4.

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5. An uncovered fueling island was located directly to the east of the storage building near the center of the Facility (see Photograph 8). The VDOT Area Maintenance Superintendent explained that all State vehicles may fuel at this location, not just VDOT vehicles. A storm drain drop inlet was located about 50 feet to the north/northeast of the fueling island (see Photograph 9). BMPs for the storm drain inlet were not evident and a visible sheen was observed on the surface of standing water within the inlet (see Photograph 10). Based on discussions with VDOT staff, stormwater runoff from the surface area around the fueling island which enters into this storm drain inlet is discharged to the roadside drainage ditch on the west side of the onramp to I-95 South, described above in the Facility description and pictured in Photograph 4.
6. Staining was observed on the ground surface beneath a "motor grader" parked along the eastern perimeter of the Facility (see Photograph 11). The motor grader was directly upgradient of a flow pathway which led to a location where stormwater runoff would exit the Facility via overland flow along the eastern perimeter of the Facility (see Photographs 12 and 13).
7. There was a vehicle and equipment washpad located along the eastern perimeter of the Facility (see Photograph 14). VDOT staff stated that the wash pad was installed about three years prior and every couple of years the sand layer in the wash pad is replaced. VDOT staff explained that the Virginia Department of Environmental Quality (DEQ) had approved the wash pad design which allows for wash water to be captured on site and infiltrate into the ground surface. This is the type of vehicle washing practice which VDOT staff stated was going to also be installed at the Richmond District Complex Facility.

Portion of the Facility to the East of I-95

8. A salt storage dome and salt pond are located in the portion of the Facility to the east of I-95 (see Photographs 15 and 16). Stormwater runoff from this portion of the Facility is conveyed to on-site storm drain inlets which discharge to the salt pond. According to the VDOT Area Maintenance Superintendent, the salt pond does not have an outlet and water in the pond evaporates or it is pumped out to be used for a brine mixture at the Pocahontas VDOT Facility. He explained that the salt pond is occasionally cleaned by removing the sediment for disposal at a landfill or removed with a vacuum truck for disposal at a wastewater treatment plant. VDOT staff stated that maintenance for salt ponds is addressed in the VDOT "Waste Management Manual."

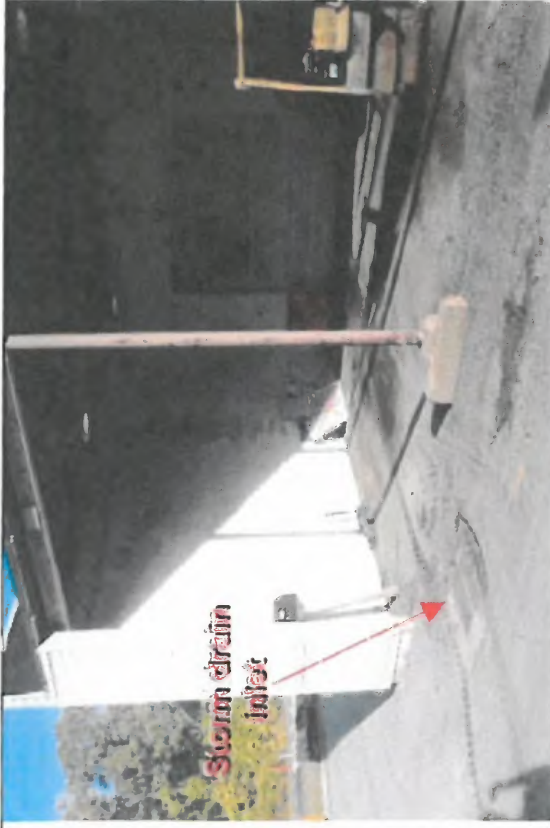
Remote Stockpile Location

9. A remote stockpile area was located about one quarter mile north of the Facility, to the west of I-95 (see Photographs 17 and 18). The VDOT Area Maintenance Superintendent explained that the main stockpile at the site was composed primarily of dirt, rock, gravel, and leaves which had been removed from VDOT's roadside ditches and from VDOT roadways by street sweeping (see Photograph 1). The VDOT Area Maintenance Superintendent stated that VDOT uses a contractor for street sweeping. The type of street sweeper the VDOT contractor uses was not discussed during the inspection.
10. VDOT staff explained that there was a large berm around the entire remote stockpile area (see Photograph 18) and that stormwater runoff from the area discharged beyond the berm through an outlet pipe along the western side of the stockpile area to a roadside ditch along the onramp to I-95 South (see Photographs 20 through 23). Accumulated sediment and debris was observed adjacent to a rock check dam installed upgradient of the outlet pipe from the stockpile area (see Photographs 24 and 25).

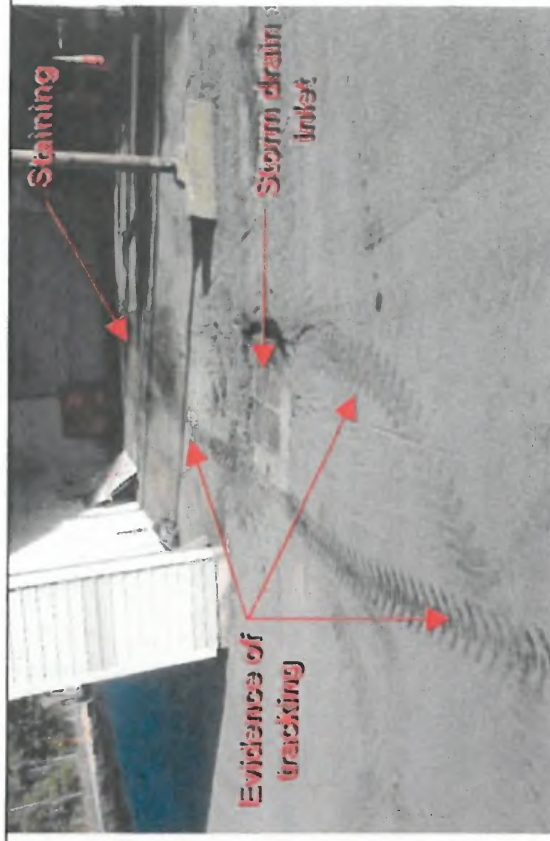
Site Photographs

VDOT MS4 (General Permit No. VAR04)
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Photograph Date: 10/23/2012



Photograph 1 – View of storm drain inlet near the southwest corner of the storage shed.



Photograph 2 – Additional view of storm drain inlet shown in Photo 1. Note evidence of tracking and lack of inlet protection.



Photograph 3 – Closer view of staining on ground surface in covered storage shed shown in Photos 1 and 2.



Photograph 4 – View of roadside ditch along onramp to I-95 South to the west of the Facility.

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Photograph 5 – View of standing water adjacent to outfall from the Facility to the roadside ditch shown in Photo 4.



Photograph 6 – View of storm drain inlet near western entrance gate to the Facility. Note sediment on impervious surface near inlet.



Photograph 7 – Close-up view of storm drain inlet shown in Photo 6.



Photograph 8 – View of uncovered fueling island directly to the east of the storage building near the center of the Facility.

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Photograph 9 – View to south of fueling island. Note storm drain inlet without BMPs for inlet protection.



Photograph 10 -- View into storm drain inlet shown in Photo 9. Note visible sheen on surface of water.



Photograph 11 – View of staining on ground surface beneath motor grader.



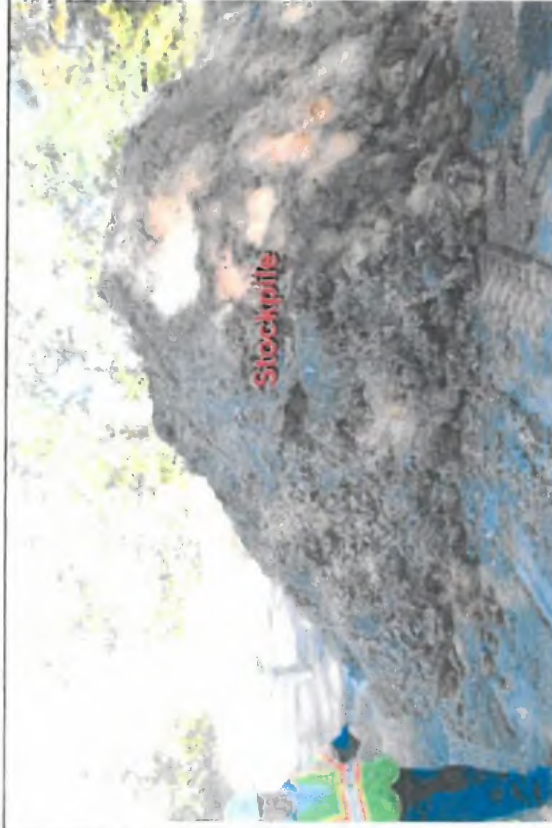
Photograph 12 – View of flow pathway downgradient of motor grader shown in Photo 11.

Site Photographs	VDOT MS4 (General Permit No. VAR04) Chester Area Headquarters Facility VDOT District No. 4	Photograph Date: 10/23/2012
		<p>Photograph 14 – View of vehicle and equipment wash pad located along the eastern perimeter of the Facility.</p>
		<p>Photograph 16 – View of salt pond associated with the salt storage dome shown in Photo 15.</p>
<p>Photograph 15 – View of salt storage dome located in the portion of the Facility to the east of I-95.</p>		

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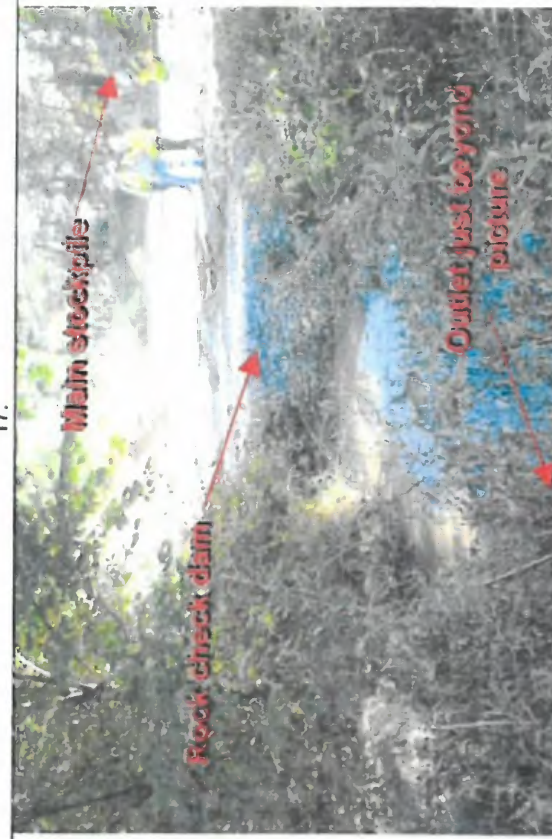
Photograph 17 – View of main stockpile at remote stockpile area.






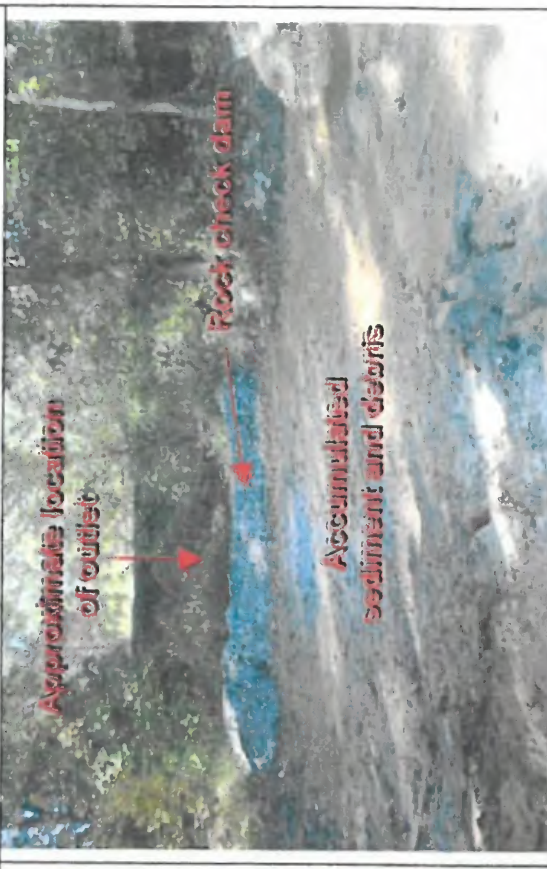
Photograph 18 – View of another portion of the stockpile shown in Photo 17.



Photograph 19 – View of additional stockpiles at remote stockpile area.



Photograph 20 – View showing main stockpile and approximate location of outlet through the large berm.

Site Photographs	VDOT MS4 (General Permit No. VAR04) Chester Area Headquarters Facility VDOT District No. 4	Photograph Date: 10/23/2012
		<p>Photograph 21 – View of outlet noted in Photo 20.</p> <p>Photograph 22 – View of downgradient end of outlet pipe from stockpile area shown in Photos 20 and 21.</p>
		<p>Photograph 23 – View of roadside ditch along the onramp to I-95 South, downgradient of outlet pipe shown in Photo 22.</p> <p>Photograph 24 – View from main stockpile toward outlet shown in Photos 20 and 21. Note accumulated sediment and debris upgradient of rock check</p>

Sign-in Sheet

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Site Visit Date: 10/23/2012



VIRGINIA DEPARTMENT OF TRANSPORTATION SITE VISIT ATTENDANCE RECORD

Location: <u>Chester Area Headquarters</u>	
Visit Date: <u>Oct 23, 2012</u>	Start Time: <u>8:30</u>
Roster Administration Notes:	
End Time:	

First Name	Last Name	Affiliation (VDOT, EPA, EEE, etc.)	Attendees Signature
1. John	Olenick	VDOT	<i>[Signature]</i>
2. Roy Smith	Smith	VDOT	<i>[Signature]</i>
3. Sharon	Harless	EEE Consulting	<i>[Signature]</i>
4. Jeff	Selinger	PCR	<i>[Signature]</i>
5. Ken	Frost	EEE	<i>[Signature]</i>
6. Ellen	Porter	OAG	<i>[Signature]</i>
7. Chuck	Scheibel	EPA 23	<i>[Signature]</i>
8. KATHAN	MCCANN	EPA 13	<i>[Signature]</i>
9. KYLE	ZIERA	" "	<i>[Signature]</i>
10. Ed	WALSH	VDOT	<i>[Signature]</i>
11. David Bishop	Bishop	VDOT	<i>[Signature]</i>
12. VLS Richardson	Richardson	VDOT	<i>[Signature]</i>
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14.			
15.			
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18.			
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